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BEFORE THE ARIZONA CORPORATION COMMISSION

DOUG LITTLE  
 CHAIRMAN

BOB STUMP  
 COMMISSIONER

BOB BURNS  
 COMMISSIONER

TOM FORESE  
 COMMISSIONER

ANDY TOBIN  
 COMMISSIONER

IN THE MATTER OF THE	)	DOCKET NO. E-01933A-15-0239
APPLICATION OF TUCSON	)	
ELECTRIC POWER COMPANY	)	THE ENERGY FREEDOM COALITION
FOR APPROVAL OF ITS 2016	)	OF AMERICA'S NOTICE OF FILING
RENEWABLE ENERGY STANDARD	)	RESPONSIVE TESTIMONY OF
AND TARIFF IMPLEMENTATION	)	CHARLES J. CICHETTI AND DAVID
PLAN.	)	W. DERAMUS, PHD

The Energy Freedom Coalition of America ("EFCA") hereby submits the Responsive  
 Testimony of Charles J. Cicchetti and David W. Deramus, PHD in the above-referenced matter.

Respectfully submitted this 28<sup>th</sup> day of March, 2016.

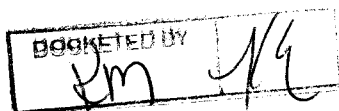
/s/ Court S. Rich

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Arizona Corporation Commission

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MAR 28 2016



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**DOCKET NO. E-01933A-15-0239**

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**RESPONSIVE TESTIMONY OF CHARLES J. CICCHETTI**

1   **Q.     Who are you?**

2   A.     I am the same Charles J. Cicchetti, Ph.D. who previously filed testimony in this  
3           proceeding.  
4

5   **Q.     What is the purpose of this testimony?**

6   A.     The Energy Freedom Coalition of America (EFCA) asked me to provide Reply  
7           Testimony to the Direct Testimony filed on March 11, 2016 by Mr. Robert Gray  
8           of the Utilities Division of the Arizona Corporation Commission (Staff), and Mr.  
9           Lon Huber on behalf of the Residential Utility Consumer Office (RUCO). Both  
10          experts address various aspects of Tucson Electric Power Company's (TEP) 2016  
11          Renewable Energy Standard and Tariff (REST) Application to expand TEP's  
12          Utility-Owned Residential Solar (TORS) program and to initiate its proposed  
13          Utility-Owned Residential Community Solar (RCS) program.  
14

15   **Reply to Mr. Gray of the Utilities Division**

16   **Q.     What are your areas of disagreement with respect to Mr. Gray of the Staff?**

17   A.     First, I fully agree with some of his fundamental conclusions:  
18           

- 19                 • "Staff does not believe that these programs are the most cost-effective
- 20                 • "...Staff believes TEP should primarily focus its efforts on no cost or least
- 21                 cost options."<sup>2</sup>
- 22                 • "...the Commission made indications that it preferred to not spend
- 23                 ratepayer dollars for a company to address compliance if it was not
- 24                 necessary to do so."<sup>3</sup>

  
25

26           Nevertheless, I disagree with how Mr. Gray seems to resolve these matters in this  
27           specific proceeding.  
28

29   **Q.     Do you believe Mr. Gray's testimony draws appropriate conclusions from his**  
30           **opposition to TORS Program expansion?**

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<sup>1</sup> Direct Testimony of Robert Gray, page 4 lines 6-7.

<sup>2</sup> *Id.* page 5 lines 8-9.

<sup>3</sup> *Id.* page 4 lines 24-25.

1 A. No. Mr. Gray's views concerns regarding "expansion" of the TORS program are  
2 neither ambiguous nor tentative. Nevertheless, I believe he fails to draw the  
3 logical conclusions that stem from his basic opinion.

4 My interpretation of the Commission's REST rulemaking proceeding,  
5 which Mr. Gray noted, is that TEP should not expand its pilot TORS program  
6 because TEP can request a waiver at no cost to "other" ratepayers if the existing  
7 third-party market is permitted to grow and remain viable. Mr. Gray comes close  
8 to my conclusion, but I think he falls short, when he expresses that:

9 "...Staff upon further reflection does also have  
10 some concern with the use of a utility's tariffs to  
11 offer subsidized services that compete with third  
12 party service providers.... Absent fulfillment of the  
13 pilot program requirements and a demonstration  
14 that the rooftop program is cost competitive with a  
15 similar community solar program or other similarly  
16 situated resources, Staff does not plan to support an  
17 expansion of the TORS program in the future."<sup>4</sup>

18  
19 Mr. Gray seemingly ignores the fact that no ratepayer money would be  
20 used to finance the DG solar systems that third parties provide. I agree that TEP  
21 has failed to perform a benefit cost analysis and has not organized an advisory  
22 committee. Regardless, the Commission's admonition that it prefers "no cost or  
23 least cost" compliance is more than a sufficient reason to reject the TORS  
24 program expansion, which uses ratepayer money—something is always more than  
25 nothing—and unreasonably (and anticompetitively) undermines third party  
26 competitors.

27 Mr. Gray ties any possible future Staff support of the TORS program to a  
28 cost comparison with the RCS program. This is not the alternative Staff should  
29 use for comparison purposes. Mr. Gray misses the point that neither the TORS  
30 program expansion nor the proposed RCS program should be allowed to go  
31 forward as rate base projects that TEP ratepayers are required to cross-subsidize.

---

<sup>4</sup> *Id.* page 11 lines 20-26.

1           Finally, Mr. Gray explained in his testimony in this proceeding that the  
2 Commission has signaled it will allow TEP to comply with its renewable energy  
3 standard requirements by seeking a waiver. More specifically, Mr. Gray stated,  
4 “In the Commission’s track and record proceeding...and the resulting REST  
5 rulemaking process...the Commission sent a clear indication that requesting a  
6 waiver of some portion of REST requirements was a viable option for a utility  
7 who would not otherwise be able to demonstrate compliance with the REST rules,  
8 with the added benefit that a waiver would not require any further ratepayer  
9 funding.”<sup>5</sup>  
10

11   **Q.   Do you agree with Mr. Gray’s views with respect to TEP’s RCS proposal?**

12   A.   No. Mr. Gray discusses residential community solar at a conceptual level and  
13 ignores TEP’s specific RCS proposal. For example, he explains that third parties  
14 could own community solar projects.<sup>6</sup> While this observation is conceptually  
15 correct, this observation is not consistent with what TEP proposes: to enter the  
16 residential community solar market segment as a rate-based regulated utility that  
17 would offer its RCS customers all their electric usage for a flat-rate bundle  
18 charge, fixed for 10 years. These characteristics would make it virtually  
19 impossible for third parties to compete because the playing field is skewed in  
20 favor of TEP. As I discuss in detail below, the solution is to require TEP to enter  
21 the DG solar market segment through a separate non-utility affiliate. In this way,  
22 competition for residential community solar would proceed on a level playing  
23 field with all entrants having equal access to potential customers and subject to  
24 the same regulatory terms and market risks.  
25

26   **Q.   Do you have additional concerns with Mr. Gray’s testimony?**

27   A.   Yes. Mr. Gray recognizes that barriers to renters and other retail customers would

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<sup>5</sup> *Id.* page 4, lines 7-14.

<sup>6</sup> *Id.* page 12, line 25-26.

1 continue under TEP's proposed RCS program.<sup>7</sup> Nevertheless, he states TEP and  
2 the Commission could address these matters in the current general rate proceeding  
3 in Docket Number E-01933A-15-0322.<sup>8</sup> However, if the Commission adopts a  
4 separate affiliate requirement for TEP provision of residential community solar,  
5 that outcome would eliminate the need to address the RCS program in TEP's  
6 upcoming rate case and no need for a prudency evaluation or for approval of new  
7 tariff riders.

8  
9 **Q. Does Mr. Gray make an attempt to address the ability of third-party  
10 community solar developers to compete with TEP's RCS program?**

11 **A.** No. Mr. Gray merely claims that third party developers or co-operatives could  
12 build community solar.<sup>9</sup> He does not address how only TEP, and no third-party  
13 community solar developer, could freeze current monthly utility payments, apply  
14 for tariff terms or agreements across multiple customers, and freely coordinate  
15 and integrate into TEP's grid and operating systems. These differences make the  
16 opportunity for third-party developers of community solar systems nothing but an  
17 abstract theory or concept. Finally, no third party community solar developer can  
18 use cost of service regulation to finance its investments and to spread operations,  
19 market, and utilization risks across all their retail customers.

20 Put simply, no community solar developer could reasonably compete with  
21 TEP.

22  
23 **Reply to Mr. Huber, testifying on behalf of RUCO**

24  
25 **Q. Do you disagree with Mr. Huber?**

26 **A** Yes I do.  
27

---

<sup>7</sup> *Id.* page 16, lines 12-15.

<sup>8</sup> *Id.* page 17, lines 3-5.

<sup>9</sup> *Id.* page 16, lines 20-22.

1   **Q.     Why do you disagree with Mr. Huber's testimony?**

2   A.   Mr. Huber states, "In general, RUCO is supportive of the filing," referring to  
3       TEP's 2016 REST filing.<sup>10</sup> He concludes that expanding the TORS program is  
4       largely a matter of "prudence. . .for the upcoming rate case."<sup>11</sup> He adds that  
5       RUCO is not making any claims that TEP's expanded or future rooftop solar  
6       investments are prudent and that RUCO will analyze "cost parity" in the TEP rate  
7       case.<sup>12</sup>

8               I disagree with Mr. Huber's conclusions, including the suggestion that the  
9       issues raised by TEP's proposals should be kicked down the road to the next rate  
10      case. First, third-party developers are financed using non-utility money, and no  
11      other customers bear any direct costs or accept risks. Kicking any regulatory  
12      determination of cost parity between customer-owned and financed rooftop DG  
13      solar and utility-owned, all ratepayer financing and risk sharing to the next rate  
14      case would needlessly result in uncertainty, a loss of efficiency, and would  
15      undermine non-regulated competitors. The separate subsidiary requirement that I  
16      recommend would directly address these problems.

17

18   **Q.     Are there any additional reasons why you disagree with Mr. Huber's**  
19       **conclusions?**

20   A.   Yes, the second basis for my disagreement with Mr. Huber is that he avers that  
21       TEP participation in rooftop solar under flat-rate bundled pricing simply  
22       represented "a diversity of business models." He also quibbles, in my opinion,  
23       that there was almost no regulated utility participation in the competitive rooftop  
24       solar market segment.<sup>13</sup> In making these unsupported assertions, he ignores all of  
25       the fundamental issues raised by TEP's proposals related to competitive  
26       foreclosure, ratepayer burden, cross-subsidization, and risk spreading to non-  
27       participants. Put differently, a mere "diversity of business models" misses the

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<sup>10</sup> Direct Testimony of Lon Huber, page 2, line 18.

<sup>11</sup> *Id.* page 3, line 3.

<sup>12</sup> *Id.* page 4, lines 6-11.

<sup>13</sup> *Id.* page 6 lines 2-9.



1 stark reality that TEP's proposals almost certainly will eliminate the existing  
2 vibrant competitive market segment for DG solar.

3  
4 **Q. Do you agree with his “approaches” to explore “a third party-centric  
5 community solar model of equivalent size”?<sup>14</sup>**

6 A. No. Mr. Huber once again misses the core point – that without requiring TEP's  
7 participation in DG solar through a separate subsidiary, no third party-centric  
8 model could possibly survive. Moreover, he once again kicks the details  
9 downstream, suggesting that the details can be resolved, “through a stakeholder  
10 process with a program filing for Commission consideration in the 2017 REST  
11 plan.”<sup>15</sup> The fact that TEP has not formed the mandated Advisory Council makes  
12 this a very dubious approach. There are problems that cannot be cured simply by  
13 allowing third-party entry, as RUCO suggests, merely as an “additional” business  
14 model—along with TEP's rate-based offering.

15 Like Mr. Gray, Mr. Huber does not seem to consider how only TEP, and  
16 no third-party community solar developer, could freeze current monthly utility  
17 payments, apply for tariff terms or agreements across multiple customers, and  
18 freely coordinate and integrate into TEP's grid and operating systems. These  
19 differences make the opportunity for third-party developers of community solar  
20 systems nothing but an abstract theory or concept. Finally, Mr. Huber does not  
21 seem to recognize that no third-party community solar developer can use cost-of-  
22 service regulation to finance its investments and to spread operations, market, and  
23 utilization risks across all their retail customers.

24  
25 **Q. How can these differences be addressed, assuming the Commission seeks to  
26 encourage community based solar?**

27 A. Competition should be on a level-playing field. As noted above, this means the  
28 Commission should require TEP to form a separate non-utility affiliate for

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<sup>14</sup> *Id.* page 6 lines 12-13.

<sup>15</sup> *Id.* page 6 lines 13-14.

1 community solar. I would also require such a non-utility affiliate for any TORS-  
2 type rooftop solar installations. Forming a separate non-utility affiliate would  
3 address simultaneously the ratepayer burden, cross-subsidization, and prudence  
4 issues. It would render moot the question of the appropriate tariff structures for  
5 the rooftop and proposed community Riders. If the Commission ordered the  
6 separate subsidiary outcome in this proceeding, there would be no need to address  
7 the TORs and RCS programs in TEP's rate case. TEP would need to adhere to  
8 Commission-approved codes of conduct, including a competitive code of conduct  
9 focusing, for example, on branding and access to usage profile and grid  
10 information, as well as requiring that the transfer of goods and services from the  
11 utility to its subsidiary be at the greater of fully allocated costs or fair market  
12 value.

13  
14 **Q. Do you agree with Mr. Huber's conclusions with respect to tariffs and**  
15 **regulations for any third party community solar developer?**

16 A. No. I think the same rules and tariff principles should apply to all competitors in  
17 any nascent community solar market segment. Mr. Huber explains that RUCO is  
18 not pushing a specific model, and specifically RUCO is not advocating support  
19 for virtual full retail net metering.<sup>16</sup> The necessary condition is that all  
20 competitors should be treated the same.

21 The best way to ensure this outcome is to require that if TEP participates  
22 in this market segment, it should do so through a non-regulated affiliate under  
23 affiliated interest regulations and constraints, and with no preferential treatment  
24 by TEP.<sup>17</sup> The affiliate's focus should be the design and offering of products  
25 predicated on the fact that distributed solar, including community based solar that

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<sup>16</sup> *Id.* page 6 lines 17-20.

<sup>17</sup> For example, is my understanding that TEP (through its parent holding company) has established a separate affiliate, Southwest Energy Solutions, Inc. to provide competitive services, e.g., back-up generation services. [http://www.swenergysolutions.com/solutions\\_generator.php](http://www.swenergysolutions.com/solutions_generator.php). This separation is consistent with the Commission's separate affiliate requirement for competitive services, R14-2-1615 (B), and has been specifically approved with respect to TEP and its affiliates in Commission Order 75033, April 23, 2015.

1 TEP proposes to offer, should not be part of any utility's regulated monopoly.  
2 For these reasons, the Commission should consider a stakeholder process  
3 that establishes the rules and mechanisms for both third parties and any non-utility  
4 TEP affiliate that seek to provide DG community solar in TEP's service territory.  
5

6 **Q. Does this complete your reply testimony?**

7 **A. Yes.**  
8

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**RESPONSIVE TESTIMONY OF DAVID W. DERAMUS PHD**

**TABLE OF CONTENTS**

1		
2	<b>RESPONSIVE TESTIMONY OF DAVID W. DERAMUS PHD .....</b>	<b>1</b>
3	I. Purpose of Testimony .....	1
4	II. Summary .....	2
5	III. Staff's Concern Regarding Utility Subsidized Services Competing with Third Party	
6	Providers Applies to the RCS As Well As the TORS Programs.....	3
7	IV. The TORS and RCS Programs Do Not Represent Beneficial Diversification of Business	
8	Models .....	5
9	V. Recommendations by Staff and RUCO to Open the RCS Program to Third Party	
10	Participation Would Not Resolve Anticompetitive Effects of the RCS Proposal .....	6
11	VI. Requiring TEP to Participate in the Residential Solar DG Program Only Through a Separate	
12	Affiliate, While Allowing Third-Party Access in Community Solar, Would Directly Address	
13	Concerns of Staff and RUCO .....	7

**RESPONSIVE TESTIMONY  
OF  
DAVID W. DERAMUS, PHD**

**Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.**

**A.** My name is David W. DeRamus. I am a Partner with Bates White, LLC. My business address is 1300 Eye Street N.W., Suite 600, Washington, DC 20005.

**Q. HAVE YOU SUBMITTED TESTIMONY PREVIOUSLY IN THIS DOCKET?**

**A.** Yes. I filed direct testimony in this docket on behalf of the Energy Freedom Coalition of America ("EFCA"), addressing the potential anticompetitive effects of proposals by Tucson Electric Power ("TEP") to expand the TEP-Owned Residential Solar ("TORS") program and to create a utility-owned Residential Community Solar ("RCS") program. This responsive testimony is also sponsored by EFCA.

**I. Purpose of Testimony**

**Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

**A.** I have been asked to respond to the direct testimony of Robert G. Gray, submitted on behalf of the Utilities Division ("Staff") of the Arizona Corporation Commission ("ACC" or "Commission"), and the direct testimony of Lon Huber, submitted on behalf of the Residential Utility Consumer Office ("RUCO"), as they relate to the potential anticompetitive impacts of TEP's proposed TORS and RCS programs.

1     II.     Summary

2     **Q. PLEASE SUMMARIZE YOUR RESPONSES TO THE TESTIMONIES OF MR.**  
3     **GRAY AND MR. HUBER.**

4     **A.** In summary, my responses are the following:

- 5     1.     I agree with the recommendation of Staff, as presented by Mr. Gray, that the  
6             Commission reject the proposed expansion of the TORS program, and I share Staff's  
7             concern over TEP offering a service subsidized through its regulated tariff that would  
8             compete with third party suppliers already active in the residential rooftop market  
9             segment.
- 10    2.     I disagree with Staff's recommendation to approve TEP's proposed RCS program in a  
11             general rate proceeding. Staff's recommendation that the program be open to non-utility  
12             owned community solar providers does not address the anticompetitive effects that  
13             TEP's utility-owned RCS program would create.
- 14    3.     Similarly, I disagree with the position of RUCO, as presented in Mr. Huber's direct  
15             testimony, that the only problem with TEP's RCS proposal is that it does not allow for  
16             entry of third-party providers of community solar. The central problem with TEP's RCS  
17             proposal is the inherent cross-subsidization it creates and the chilling effect it would  
18             have on competitive residential solar offerings already available in TEP's service  
19             territory.
- 20    4.     The legitimate concerns of Staff and RUCO regarding TEP's proposed utility-owned  
21             solar distributed generation ("DG") programs would be resolved fully by requiring TEP  
22             to create a distinct business affiliate, separate from its regulated monopoly franchise, in  
23             order to offer residential solar DG services. TEP should further be required to adhere to  
24             a Commission-approved code of conduct to ensure that the TEP affiliate does not benefit  
25             from any business advantages through its relationship with TEP that are not also equally  
26             available to third-party providers.

1     **III.     Staff's Concern Regarding Utility Subsidized Services Competing with Third Party**  
2     **Providers Applies to the RCS As Well As the TORS Programs**

3     **Q. DO YOU AGREE WITH STAFF'S REASONS FOR RECOMMENDING THAT**  
4     **TEP'S PROPOSED EXPANSION OF THE TORS PROGRAM BE REJECTED?**

5     **A.** Yes, although Staff's expressed concern about the potential anticompetitive impact of the  
6     TORS program does not fully address the substantial harm presented by the cross-  
7     subsidization and the exclusionary effects associated with TEP's proposal. I agree with  
8     Staff that neither expansion of the TORS program nor creation of the utility-owned RCS  
9     program is justified by a need for TEP to meet its residential DG requirement under the  
10    Renewable Energy Standard and Tariff rules.

11    **Q. TO WHAT EXTENT DOES MR. GRAY ADDRESS THE ANTICOMPETITIVE**  
12    **ASPECTS OF TEP'S PROPOSALS?**

13    **A.** Mr. Gray touches only briefly in his testimony on the more fundamental problem of the  
14    significant anticompetitive potential of the TORS program, when he states that Staff "does  
15    also have some concern with the use of a utility's tariffs to offer subsidized services that  
16    compete with third party service providers."<sup>1</sup> As I discuss in my direct testimony in this  
17    docket, there are very substantial anticompetitive implications of a monopoly utility forcing  
18    itself into a market segment that is already served competitively, as is the case with  
19    residential rooftop solar in TEP's service territory. Doing so would allow TEP to use the  
20    advantages of its utility franchise to foreclose competitors from providing residential DG  
21    services, and TEP would thereby eliminate third-party competition in this market segment.

---

<sup>1</sup> Gray Direct Testimony, page 11, lines 20-21.



1 The combination of putting the TORS rooftop solar assets into TEP's rate base and offering  
2 customers fixed pricing over 25 years would compel TEP's captive ratepayers to effectively  
3 guarantee TEP's cost recovery and its regulated return on capital investment, and to bear the  
4 associated business risks in full. This type of utility cross-subsidization is at the core of  
5 regulatory concerns over monopoly utilities providing products and services in competitive  
6 markets, to the disadvantage of third-party businesses that cannot force captive ratepayers to  
7 shoulder such business risk. As I discuss in my direct testimony, TEP would retain other  
8 anticompetitive advantages associated with its monopoly position, including privileged  
9 access to information about the distribution grid and about potential customers that would  
10 artificially benefit the utility's entry into otherwise competitive activities, and disadvantage  
11 third-party businesses. TEP's monopoly advantages will discourage market entry by other  
12 competitors and ultimately drive third-party businesses out of the DG solar market segment  
13 entirely, depriving customers of the benefits of competition: namely, increased choice,  
14 innovative products, improved service quality, and lower prices.

15 **Q. PLEASE EXPLAIN YOUR DISAGREEMENT WITH STAFF'S**  
16 **RECOMMENDATION TO APPROVE TEP'S RCS PROPOSAL.**

17 **A.** While I generally concur with the Staff opinion, as expressed in Mr. Gray's testimony, that  
18 community solar can offer important benefits, such as DG access for residential customers  
19 unable to undertake rooftop solar, and potential economies of scale in construction and  
20 operation, I disagree that the proposed RCS program is an appropriate means for pursuing  
21 such benefits. Indeed, the RCS program would not expand access, since it is explicitly  
22 aimed only at customers currently eligible for net-metering.

23 More importantly, the RCS program would have the same types of anticompetitive effects as  
24 the TORS program. By putting RCS assets into its rate base, providing long-term fixed  
25 pricing, and leveraging substantial monopoly utility advantages in information and customer

1 access, TEP would undermine the competitive rooftop solar market segment, stifle  
2 investment and innovation, and ultimately wall off the residential solar market segment as  
3 another exclusive domain of the regulated monopoly utility.

4 IV. The TORS and RCS Programs Do Not Represent Beneficial Diversification of Business  
5 Models

6 **Q. DO YOU AGREE WITH RUCO THAT TORS AND RCS CAN OFFER BUSINESS**  
7 **MODEL DIVERSITY THAT BENEFITS CUSTOMERS?**

8 A. No, I do not. As described in Mr. Huber's direct testimony, RUCO supported the TORS  
9 pilot in part because RUCO believed it provided increased diversity of business models in  
10 the residential rooftop solar market segment, which would benefit customers.<sup>2</sup> I strongly  
11 disagree that having a regulated monopoly utility enter an otherwise competitive market  
12 segment and offer a competing service that exploits unique utility franchise advantages and  
13 is cross-subsidized by captive customers represents a beneficial diversification of business  
14 models. Quite the contrary: as summarized above, and as detailed in my direct testimony,  
15 both the TORS and RCS programs would have substantial anticompetitive impacts that  
16 would stifle competition and ultimately dismantle the existing competitive residential solar  
17 market segment in TEP's service territory.

18 I agree that customers can benefit from products and services offered through a diversity of  
19 business models, and in my direct testimony I point to such diversification as being among  
20 the valuable innovations developed by the competitive rooftop solar industry. The essential  
21 distinction is that such innovation and diversification has occurred under the discipline of a  
22 competitive market segment where unregulated businesses and their direct customers take

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<sup>2</sup> Huber Direct Testimony, page 6, lines 5-8.

1 on the associated investment and business risk. This is in stark contrast to what would occur  
2 with the TORS and RCS programs, under which all captive ratepayers would be forced to  
3 effectively guarantee the utility's program costs and shoulder the associated business risk, to  
4 the disadvantage of third-party competitors. Far from expanding the diversity of business  
5 models serving customers, TEP's proposals would ultimately eliminate the valuable  
6 diversity that a competitive market segment has provided to date.

7 V. Recommendations by Staff and RUCO to Open the RCS Program to Third Party  
8 Participation Would Not Resolve Anticompetitive Effects of the RCS Proposal

9 **Q. WOULD OPENING RESIDENTIAL COMMUNITY SOLAR TO PARTICIPATION**  
10 **BY THIRD PARTIES RESOLVE THE ANTICOMPETITIVE EFFECTS OF RCS?**

11 A. No, it would not. Both Staff and RUCO recommend opening RCS to third-party  
12 participation, but such proposals do not address the underlying anticompetitive effects of  
13 utility ownership of solar DG. As described in Mr. Gray's direct testimony, Staff intends to  
14 recommend in TEP's general rate case that TEP solicit non-utility community solar in an  
15 amount at least equal to the amount of utility-owned community solar TEP pursues or,  
16 alternatively, that TEP propose another method to "meaningfully include non-utility owned  
17 community solar projects in its future community solar efforts."<sup>3</sup> Similarly, RUCO proposes  
18 "exploring a third party-centric community solar model of equivalent size [to TEP's  
19 program]."<sup>4</sup>

20 Both the Staff and RUCO proposals miss the essential point that it is the utility-ownership  
21 construct of the RCS program that is the problem, because it would establish substantial

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<sup>3</sup> Gray Direct Testimony, page 17, lines 10-20.

<sup>4</sup> Huber Direct Testimony, page 6, lines 12-13.

1 anticompetitive advantages for TEP in the residential solar DG market segment, and would  
2 undermine an existing competitive marketplace to the detriment of customers. For this  
3 reason, any attempt to open RCS to third-party participation would be doomed to fail  
4 because TEP's anticompetitive advantages would ensure its dominance in the DG solar  
5 market segment. As I explained in my direct testimony and describe more fully below, the  
6 appropriate and effective solution to the anticompetitive effects of the RCS program, and to  
7 those of the TORS program as well, is to require that any TEP involvement in the residential  
8 solar DG market segment be through creation of a distinct affiliated company that  
9 participates on equal terms with third-party providers, with appropriate safeguards against  
10 cross-subsidization and other preferential interaction with TEP's regulated business.

11 VI. Requiring TEP to Participate in the Residential Solar DG Program Only Through a  
12 Separate Affiliate, While Allowing Third-Party Access in Community Solar, Would  
13 Directly Address Concerns of Staff and RUCO

14 **Q. HOW WOULD CREATION OF A SEPARATE TEP AFFILIATE RESOLVE**  
15 **ANTICOMPETITIVE CONCERNS WITH THE TORS AND RCS PROGRAMS?**

16 A. Staff and RUCO have recognized that third-party participation in residential and community  
17 solar DG programs is good for customers. Yet both Staff and RUCO support utility  
18 ownership and provision of solar DG through TEP's RCS program, which would inflict the  
19 same anticompetitive harms as the TORS program. While Staff and RUCO propose that  
20 community solar be opened in some fashion to third-party participation, this is, at best, a  
21 necessary condition for allowing competition, and is by no means sufficient to ensure that  
22 the anticompetitive effects of utility ownership do not drive third-parties entirely out of the  
23 solar DG market segment in TEP's service territory.

24 The problem of utility ownership of community solar DG, particularly under the RCS  
25 proposal, with full rate-basing of facilities investment and long-term flat pricing, is that it is  
26 a "business model" that is unavailable to any market participant other than the regulated

1 utility. At its core is the traditional monopoly utility model that provokes regulatory  
2 concerns whenever utility activities have the potential to impinge upon existing competitive  
3 markets or restrict development and growth of such markets. As I addressed in my direct  
4 testimony, allowing third-party access is only an initial precondition for ensuring against  
5 monopoly foreclosure. Equally important is that the monopoly utility be prevented from  
6 competing unfairly by leveraging its inherent advantages. The most reliable way to do this  
7 is to require that a utility undertake competitive market activities only through a separate  
8 affiliate and subject to effective restrictions on affiliate abuse and anticompetitive conduct.

9 **Q. WOULD REQUIRING TEP TO OFFER DG SOLAR THROUGH A SEPARATE**  
10 **SUBSIDIARY BE SUFFICIENT TO PROTECT COMPETITION IN THE DG**  
11 **SOLAR MARKET SEGMENT GOING FORWARD?**

12 **A.** Requiring TEP to establish a separate affiliate through which to pursue residential and  
13 community solar DG, with appropriate conditions and mechanisms to allow for third party  
14 participation on an equal basis, would resolve the stated concerns of Staff and RUCO and  
15 preserve competition going forward if implemented effectively with a code of conduct as  
16 discussed below. It would prevent harm to competition in the existing residential solar DG  
17 market segment; it would eliminate the burden imposed on ratepayers by putting solar DG  
18 costs into TEP's rate base; it would allow for entry on equal terms by third-party businesses  
19 into the community solar market segment; and it would potentially expand, rather than  
20 narrow, the business models under which solar DG is currently provided.

21 **Q. WOULD THIS APPROACH OBVIATE THE NEED TO TAKE THIS ISSUE UP IN A**  
22 **SUBSEQUENT RATE CASE?**

23 **A.** Yes. An additional benefit of requiring TEP to pursue solar DG only through a separate  
24 affiliate is that it would eliminate the need to address the TORS and RCS programs in TEP's

1 upcoming rate case. There would be no need for a prudency evaluation or for approval of  
2 new tariff riders.

3 **Q. WHY IS A CODE OF CONDUCT WITH RESPECT TO TEP'S COMPETITIVE**  
4 **ACTIVITIES NECESSARY?**

5 **A.** Requiring TEP to establish a separate affiliate through which to pursue competitive solar  
6 DG would eliminate the most obvious source of anticompetitive cross-subsidy, which occurs  
7 when assets used for competitive services are placed in a utility's rate base, but a code of  
8 conduct is still necessary to prevent TEP from using its inherent monopoly utility  
9 advantages to artificially benefit its affiliate and thereby suppress third-party competition.

10 At a minimum, an effective code of conduct would need to ensure that the TEP affiliate does  
11 not have preferential access to critical competitive information such as customer usage data,  
12 customer premise characteristics, physical and operational details about the distribution grid,  
13 etc. TEP must be required to provide any such information, as well as any services  
14 performed by TEP through its regulated business, to its affiliate and to third party market  
15 participants on equal terms. A code of conduct should also prevent a TEP affiliate benefiting  
16 from TEP branding, from preferential marketing to customers via bill inserts and other  
17 promotions supported by TEP's regulated business, and should establish rules for  
18 transparent accounting of all transactions between TEP and its affiliate. The Commission  
19 has identified such issues in its rules that require Commission-approved Codes of Conduct  
20 to prevent anticompetitive activities when utility affiliates provide competitive services,  
21 R14-2-1616(B).

22 **Q. WHAT MECHANISMS COULD BE USED TO FACILITATE COMPETITIVE**  
23 **ACCESS IN COMMUNITY SOLAR DG?**

24 **A.** Mr. Huber has outlined some mechanisms that could be implemented to allow for third-  
25 party provision of community DG solar. One is "virtual net metering", which would mimic

1 the direct net metering and associated tariff treatment currently applied to eligible rooftop  
2 solar installations. Others include a “sleeving” arrangement, in which TEP acts as an  
3 intermediary between the community solar provider -- including third parties and the TEP  
4 affiliate -- and the retail customer; and distribution wheeling, under which TEP would  
5 provide distribution access to third parties through a separate tariff. I do not propose that  
6 any particular approach be employed, and agree with Mr. Huber that a stakeholder process  
7 should be pursued to develop an appropriate mechanism. However, it is imperative that  
8 whatever approach is used to allow for third-party community DG solar offerings provide  
9 competitively equivalent access to third parties and any TEP affiliate.

10 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

11 **A.** Yes.